

## **ATTORNEY DOCKET NO. HKPC/196/US**

Applicants herein enclose amended Figures 6-A, 6-B and 6-C. The amendments to Figures 6-A, 6-B and 6-C add no new matter and merely arrange the material previously present in the drawings in a clarifying manner and are consistent with respect to the Examiner's comments.

### **Claim Rejections Under 35 U.S.C. §101**

Claims 1-23 have been rejected under 35 U.S.C. §101, wherein it is asserted that the claimed invention is directed to non-statutory subject matter. In particular, the Examiner has cited to In re Toma, 197 USPQ 852 (CCPA 1978), wherein it has been asserted that the claim contains "broadly recited steps which do not recite sufficient computer structure that are within 'technological arts'."

Claims 1, 7, 8, 10, 12, 16, 20 and 21 have been amended as suggested by the Examiner. As amended, the rejection 35 U.S.C. §101 no longer applies.

### **Claim Rejections Under 35 U.S.C. §112, Second Paragraph**

Claims 1-23 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claim 1 has been rejected wherein it is asserted that the "limitation (b) employing a bar..." is vague and unclear. The Examiner has requested clarification on how the Applicant is "employing a bar within the scope of the invention".

The courts have addressed on numerous occasions the proper standard for a rejection under 35 U.S.C. §112, second paragraph. The proper "test for definiteness is whether one skilled in the art would understand the bounds of the claims when read in light of the specification . . . if the claims read in light of the specification reasonably apprised those skilled in the art of the scope of the invention, section 112 demands no more...[t]he degree of precision necessary for adequate claims is a function of the nature of the subject matter". Miles

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Laboratory, Inc. v. Shandon, Inc. 997, F.2d 870 (Fed. Cir. 1993), cert. denied, 510 U.S. 1100 (1994).

The meaning of employing a bar with a processor is clear from a reading of the specification and claims as a whole. Applicants respectfully direct the Examiner's attention to, for example, step (a) of claim 1 wherein bars are associated with an interval. Applicants also respectfully direct the Examiner's attention to the specification generally and in particular to at least page 3 wherein a bar is clearly disclosed to be representative of a range of data. As such it is clear that employing a bar, representative of a range of data, with a processor is to, for example, build a frequency distribution.

In claim 1 the limitation "(c) deriving a set of discrete inter-market elements" is unclear. Claim 1 has been amended and as amended, it is clear that deriving a set of discrete inter-market elements from said frequency distribution is completed with a processor.

In claim 1, the limitation "(d) representing each said element of said set of inter-market elements . . . " is vague. As amended, it is clear that representing each element of said set of inter-market elements is on a computer display device. As such, a rejection under 35 U.S.C. §112 no longer applies.

Claim 16 has been rejected under 35 U.S.C. §112 second paragraph wherein the Examiner has requested clarification as to how "calculating a mean price of the price distribution" is accomplished. Amended claim 16 includes by a processor and as such, a rejection under 35 U.S.C. §112 second paragraph in light of the specification and claims as a whole is improper. In addition, the word defining in part (c) of claim 16 has been considered to be unclear. Claim 16 as amended, "defining" is accomplished with a processor and as such a proper rejection under 35 U.S.C. §112 second paragraph does not apply.

In summary, the rejections under 35 U.S.C. §112 second paragraph do not apply since the process steps include sufficient computer structures so that the invention falls within the "technological arts", and the meaning of the claims

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are sufficiently clear, under the applicable law, to point out the subject matter which Applicants regard as their invention.

### **Claim Rejections Under 35 U.S.C. §102**

Claims 1-23 have been rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent No. 6,272,474 to Garcia, wherein it is asserted that Garcia teaches each of the claimed limitations. Applicants respectfully note the proper standard under 35 U.S.C. §102 for finding anticipation is that the prior art must disclose each and every limitation found in the claims, either expressly or inherently. Rockwell International Corp. v. United States, 147 F.3d 1358, 1363 (Fed. Cir. 1998); Electro Med System S.A. v. Cooper Life Sciences, 34 F.3d 1048, 1052 (Fed. Cir. 1994). Furthermore, the omission of any claimed element no matter how insubstantial is grounds for traversing a rejection based on Section 102. Connell v. Sears Roebuck & Co., 772 F.2d 1542 (Fed. Cir. 1983). A rejection under 35 U.S.C. §102 is improper since Garcia does not, at a minimum, disclose representing on a computer display device each element of said inter-market elements by a first geometric figure and overlaying said first geometric figure onto said bar.

### **Claimed Invention is Non-Obvious Under a Proper 35 U.S.C. §103 Analysis**

The claimed invention is additionally non-obvious with regard to Garcia since there is at the minimum no suggestion or motivation present in the teaching or disclosure of Garcia, or within the knowledge of one of ordinary skill in the art as evidenced by, at least, the references cited in the Office Action, to do what the Applicants have done in the claimed invention. For example, at a minimum Garcia does not teach or suggest representing on a computer display device each element of said inter-market elements by a first geometric figure and overlaying said first geometric figure onto said bar. Applicants note that as thoroughly discussed in a recent court holding:

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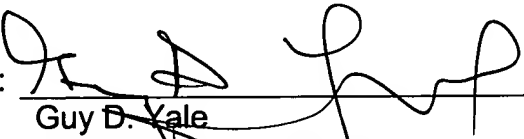
"...the essential factual evidence on the issue of obviousness is set forth in Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966) and extensive ensuing precedent. The patent examination process centers on prior art and the analysis thereof. When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. See, e.g., McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001) ("the central question is whether there is reason to combine [the] references," a question of fact drawing on the Graham factors)." In re Lee, 61 USPQ2d, 1430 (Fed. Cir. 2002)

Such a rigorous examination required by law clearly would find the claimed invention non-obvious based on at least a study of the problem to be solved by the Applicants, and the functionality of the claimed invention.

In summary, Applicants have addressed each of the objections and rejections within the present Office Action. It is believed the application now stands in condition for allowance and prompt favorable action thereon is earnestly solicited.

Respectfully Submitted,

Vincent Ching Ping Li et al

By:   
Guy D. Yale  
Registration No. 29,125  
Alix, Yale & Ristas, LLP  
Attorney for Applicants

Date: JUNE 16, 2003  
750 Main Street – Suite 1400  
Hartford, CT 06103-2721  
(860) 527-9211  
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**CLEAN COPY OF THE AMENDED PORTIONS OF THE APPLICATION**

In the Claims:

Claims 1, 7, 8, 10, 12, 16, 20, and 21 have been amended as indicated below.

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1. A computerized method for monitoring for a user the price activities of a financial instrument traded in a financial instrument traded in a financial market in a given timeframe, comprising the steps of:

(a) plotting a plurality of bars on a price-time chart by a processor wherein said price-time chart is a two dimensional chart, with the Y-coordinate representing price and X-coordinate representing time, with the X-axis divided into a predetermined plurality of discrete intervals, each interval has a bar associated with it, each interval represents an amount of time equal to that of the given timeframe, each bar indicates at least a high price and a low price traded by the market during the associated time interval of the bar and each bar is vertically displayed on said chart;

(b) employing a bar with the processor from said chart and building a frequency distribution with the processor wherein an interval between a high and low price of said bar is divided into a plurality of discrete predetermined price intervals and said frequency distribution identifies the amount of trading activities taken place in each of the said discrete price intervals within the period of time represented by said bar;

(c) deriving a set of discrete intra-market elements from said frequency distribution with the processor, said set of discrete intra-market elements comprising at least one of a continuous price range containing substantially high

B<sup>1</sup> trading activities, a price interval containing the highest trading activities, and a continuous price range containing substantially low trading activities;

(d) representing on a computer display device each element of said set of intra-market elements by a first geometric figure, and overlaying said first geometric figure onto said bar; and

(e) displaying on a computer display device the overlaid price-time chart to the user.

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7. The method of Claim 1, further comprising:

B<sup>2</sup> graphically representing on a computer display device a price interval with the highest trading activities by a dot, said dot having a diameter substantially smaller than the physical length of a time interval on the X-axis of said price-time chart, said dot having a center being collinear with the high and low price of said bar, and the said dot having a Y-coordinate centered on the mid-point of said price interval.

8. The method of Claim 1, wherein said continuous price range with substantially low trading activities is a continuous price range with the top end being the high price of said bar, said continuous price range encompasses a set of price intervals on the frequency distribution diagram, and each price interval of said set of price intervals contains trading activities below a predetermined amount; and the step of representing each element further comprises:

graphically representing on a computer display device said continuous price range on said bar by a second geometric figure.

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B<sup>3</sup> 10. The method of Claim 1, wherein said continuous price range with substantially low trading activities is a continuous price range with the bottom end of the range being the low price of the bar, said continuous price range encompasses a set of price intervals on the frequency distribution diagram, and

B3 each price interval of said set of price intervals contains trading activities below a predetermined amount;

and the step of representing each element further comprises:

graphically representing on a computer display device said continuous price range with substantially low trading activities on said bar by a third geometric figure.

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B4 12. The method of Claim 1, further comprising:

graphically representing on a computer display device at least one continuous price range with substantially high trading activities by a fourth geometric figure and overlaying said fourth geometric figure onto said bar, said fourth geometric figure being a rectangle with a predetermined width and length, said rectangle has vertices with Y-coordinates enclosing said continuous price range with substantially high trading activities, and said rectangle has the center being collinear with the high and low price of said bar.

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B5 16. The method of Claim 1, wherein said continuous price range containing substantially high trading activities is derived by steps comprising:

(a) calculating by a processor a mean price of the price distribution from said frequency distribution, denoting the result by X;

(b) calculating by a processor a standard deviation price of the price distribution from said frequency distribution and denoting the result by Y; and

(c) defining with a processor said continuous price range to be the value  $X \pm (Y) (b)$ , wherein b is a predetermined constant.

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B6 20. The method of Claim 1, wherein the step of taking a bar from the chart further comprises:

taking each of the bars from the said chart, and determining frequency distribution for each bar;

and the step of deriving a set of discrete intra-market elements further comprises:

for each of the bars, deriving set of intra-market elements from the corresponding frequency distribution, said set of intra-market elements comprise at least one intra-market element;

and the step of representing each element further comprises:

graphically representing on a computer display device each intra-market element of said set of intra-market elements by a fifth geometric figure and overlaying said fifth geometric figure onto the bar.

21. The method of Claim 1, wherein said frequency distribution diagram is built internally by a computer while the price-time chart with the overlaid intra-market elements is displayed on a computer display device to the user.

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